<u>**CLAIM AMENDMENTS:**</u>

Please amend the claims as follows:

1-16. (Cancelled)

17. (New) A computer-implemented system for implementing an interface for accessing data in a class in an object oriented programming environment, the system comprising:

a first interface D and a second interface E;

a class G configured to implement interface D and interface E;

a first function G1 that is a member of class G and a member of interface D;

a second function G2 that is a member of class G and a member of interface D but not a member of interface E;

a third function G3 that is a member of class G and a member of interface E but not a member of interface D;

a first interface vtable G.D comprising a first pointer configured to point to function G1 and a second pointer configured to point to function G2;

a second interface vtable G.E comprising a first pointer configured to point to function G1 and a second pointer configured to point to function G3; and

an object, the object being an instance of class G;

wherein, if the object is of type D, interface vtable G.D is used during runtime to connect functions G1 and G2 with the object; and

wherein, if the object is of type E, interface vtable G.E is used during runtime to connect functions G1 and G3 with the object.

18. (New) A system according to claim 17, wherein the object comprises:

an instance of interface D, the instance of interface D including a third pointer to point to interface vtable G.D; and

an instance of interface E, the instance of interface E including a fourth pointer to point to interface vtable G.E.

19. (New) A system according to claim 18, wherein the pointers in the vtables allow for casting of references of an interface type into references whose type is defined by the class configured to implement the interface for that interface type.

20. (New) A system according to claim 17, wherein the object comprises:

a fifth pointer configured to point to a canonical base address for the object.